

Application No.: 09/937,986

Docket No.: AP9610 (209565-84182)

AMENDMENTS TO THE CLAIMS

1-24. (Cancelled)

25. (Currently Amended) Method for controlling the driving dynamics of a vehicle, comprising the steps of:

determining a loss of tire pressure by monitoring at least one of the vehicle parameters, vehicle speed, longitudinal acceleration, yaw rate, transverse acceleration, steering angle, curve characteristic quantity, wheel acceleration, wheel slip, wheel slip gradient, tire torsion,

modifying the response of one or more vehicle control systems based on the results of the determining step wherein the modifying step further includes modifying the response of a vehicle brake control system by changing a brake control nominal value, a brake response threshold, or a control algorithm for the brake system in dependence on the loss in tire pressure,

wherein said changing step includes changing a wheel specific nominal quantitative value for the wheel that has sustained a pressure loss.

26-29. (Cancelled)

30. (Previously Presented) Method as claimed in claim 25, further including the step of:

conducting a traction slip control maneuver wherein a nominal value, a response threshold, a control algorithm for the brake system, or the engine is set or changed in dependence on the tire pressure condition.

31. (Previously Presented) Method as claimed in claim 25, further including the step of:

limiting the maximum speed of the vehicle by engine intervention when pressure loss is detected.

32. (Previously Presented) Method as claimed in claim 25, further including the step of:

determining a test quantity from an input quantity for the purpose of pressure loss detection, wherein the input quantity is modified according to the driving dynamics variable.

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33. (Previously Presented) Method as claimed in claim 25, further including the step of:
determining a test quantity for pressure loss detection, wherein the test quantity is modified according to the driving dynamics variable.

34. (Previously Presented) Method as claimed in claim 25, wherein the step of determining a loss of tire pressure remains undone when the vehicle parameters lie outside a predetermined range of parameter values.

35. (Previously Presented) Method as claimed in claim 33, further including the step of:
determining a modification quantity during operation of the vehicle and storing said modification quantity in a non-volatile fashion.

36. (Currently Amended) Device for controlling the driving dynamics of a vehicle comprising:
sensor means for monitoring a vehicle parameter,
at least one controller connected between said sensor means and an actuation means, wherein said actuation means is coupled to a vehicle component for effecting a change in the driving dynamics of the vehicle, and wherein said controller includes a pressure loss detection means for determining when said vehicle parameter is indicative of a loss of tire pressure wherein the controller is a brake controller which changes a brake nominal value, a brake response threshold, or a control algorithm for a vehicle brake system in dependence on the tire pressure condition, ~~for a wheel that has sustained a tire pressure condition wherein the change by the brake controller includes changing a wheel-specific quantitative value for the wheel that has sustained a pressure loss.~~

37. (Cancelled)

38. (Previously Presented) Device as claimed in claim 36, wherein the brake controller is a traction slip brake controller which sets or changes a nominal value, a response threshold, a control algorithm for the brake system, or the engine in dependence on the tire pressure condition.

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39. (Previously Presented) Device as claimed in claim 36, further including a modification device which influences the pressure loss detection in dependence on at least one driving dynamics variable.
40. (Previously Presented) Device as claimed in claim 39, wherein the modification device operates in dependence on one or more of the following quantities: vehicle speed, longitudinal acceleration, yaw rate, transverse acceleration, steering angle, curve characteristic quantity, wheel acceleration, wheel slip, wheel slip gradient, tire torsion.
41. (Previously Presented) Device as claimed in claim 39, wherein the determining device operates with respect to an input quantity, and wherein the modification device modifies the input quantity according to the driving dynamics variable.
42. (Previously Presented) Device as claimed in claim 39, wherein the determining device determines a test quantity, and wherein the modification device modifies the test quantity according to the driving dynamics variable.
43. (Previously Presented) Device as claimed in claim 39, wherein the modification device leaves the pressure loss detection undone when the driving dynamics variable lies outside a predetermined range of values.
44. (Previously Presented) Device as claimed in claim 41, further including a non-volatile memory for storing a modification quantity which is determined during operation of the vehicle.